

**STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL
QUALITY**

**Second Amended Declaration of
Emergency and Administrative Order**

**Hurricane Katrina and its Aftermath
Agency Interest No. 130534**

November 2, 2005

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**STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**IN THE MATTER OF
HURRICANE KATRINA
AND ITS AFTERMATH**

AGENCY INTEREST NO. 130534

**SECOND AMENDED DECLARATION OF EMERGENCY
AND ADMINISTRATIVE ORDER**

Pursuant to the authority granted to me by Louisiana Revised Statutes 30:2001 *et seq.*, and particularly La. R.S. 30:2033 and 2011(D)(6), I hereby make the following findings, declaration and order, which supersede the Declaration of Emergency and Administrative Order issued by this agency on August 30, 2005, and the Amended Declaration of Emergency and Administrative Order issued by this agency on September 3, 2005:

FINDINGS AND DECLARATION

1. On the 29th day of August, 2005, Hurricane Katrina (hereinafter "Hurricane") struck Louisiana, causing widespread damage within the parishes of Ascension, Assumption, East Baton Rouge, East Feliciana, Iberia, Iberville, Jefferson, Lafourche, Livingston, Orleans, Plaquemines, Pointe Coupee, St. Bernard, St. Charles, St. Helena, St. James, St. John, St. Mary, St. Martin, St. Tammany, Tangipahoa, Terrebonne, Washington, West Baton Rouge, and West Feliciana, which parishes shall constitute the specific areas covered by this Declaration and Order. These areas shall herein be referred to as the "Emergency Areas."

2. By State of Louisiana Proclamation No. 48 KBB 2005, the Governor declared on August 26, 2005, that a state of emergency exists in the state of Louisiana, as Hurricane Katrina poses an imminent threat, carrying severe storms, high winds and torrential rain that may cause flooding and damage to private property and public facilities and threaten the safety and security of the citizens of the state of Louisiana. By State of Louisiana Proclamation No. 54 KBB 2005, the Governor extended the state of

emergency due to the extreme damage caused by Hurricane Katrina and the continuing disaster and emergency conditions in the affected areas.

3. On August 29, 2005, FEMA issued a Disaster Declaration, FEMA-1603-DR covering south Louisiana.

4. I find that the Hurricane has created conditions that require immediate action to prevent irreparable damage to the environment and serious threats to life or safety throughout the Emergency Areas.

WHEREFORE, I hereby declare that an emergency exists, and that the following measures are necessary to prevent irreparable damage to the environment and serious threats to life or safety throughout the Emergency Areas.

ORDER

Within the Emergency Areas:

§ 1. Waste Water Treatment Systems

a. Upset Provisions

Permittees with Louisiana Pollutant Discharge Elimination System (LPDES) permits should consider activating the upset provisions in their permits. LAC 33:IX.2701.N.1 defines upset as the following:

An exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of LAC 33:IX.2701.N.3 are met. For upsets caused by this hurricane, the 24 hour oral notification is waived unless the non-compliance may

endanger human health. Authorization is hereby granted to discharge water placed in storage tanks or other containers or vessels for the purpose of stabilization, provided that the tanks, containers or vessels had been emptied of their previous contents prior to filling with the water. To the extent practicable, discharges should not contain free oil, hydrocarbons or other pollutants in other than trace amounts. No free oil shall mean that the discharge shall not create a visible sheen. Water that accumulates in storage tanks, containers or vessels as a result of rainfall, flooding or tidal surge may be discharged under the same conditions.

Appendix A sets forth guidance to operators of sanitary waste water treatment systems to aid in the return to compliant operations to prevent further damage to the environment and serious threats to life or safety throughout the Emergency Areas.

b. Discharges from Potable Water Treatment Systems

The discharge of pollutants from all potable water treatment systems is subject to the Louisiana Pollutant Discharge Elimination System (LPDES) General Permit for potable water treatment plants. Under ordinary circumstances, LDEQ requires the complete submission of a Notice of Intent to Discharge, evaluation and response from LDEQ prior to commencement of discharge.

However, to alleviate shortages of potable water in the Emergency Areas, authorization is hereby granted for new discharges of wastewaters associated with potable water treatment systems in the Emergency Areas, and the requirement for submission of a Notice of Intent to Discharge, evaluation and response from LDEQ is hereby waived. Any such discharges must comply with LPDES Permit LAG380000, Potable Water Treatment Plant General Permit. The effluent limitations and requirements set forth in the General Permit can be viewed online at <http://www.deq.louisiana.gov/permits/lpdes/pdf/LAG380000.pdf>. A copy of the General Permit can be obtained by calling the Office of Environmental Services at (225) 219-3181.

Deadlines for monitoring and reporting requirements are addressed in Section 12 of this Declaration of Emergency and Administrative Order.

Authorization to discharge pursuant to this Declaration of Emergency and Administrative Order shall terminate upon the expiration of this Declaration of Emergency and Administrative Order. Any facility owner or operator requiring continued coverage under the General LPDES Permit subsequent to the expiration of this Order shall submit a Notice of Intent to Discharge from a Potable Water Treatment Plant to the Department by the expiration date of the Order. The application form, H2O-G, can be found at <http://www.deq.louisiana.gov/permits/lpdes/index.htm>, or by calling the Office of Environmental Services at (225) 219-3181.

Any owner or operator who commences discharge of pollutants from a portable potable water treatment unit pursuant to this Order shall submit written notification to the Office of Environmental Services at P.O. Box 4313, Baton Rouge, LA 70821-4313, within five (5) days of the commencement of the discharge.

c. Discharges from Temporary Housing Locations

Guidelines pertaining to sanitary discharges related to temporary housing sites are provided in Appendix B of this Declaration.

d. Gray Water Discharges

The Department hereby authorizes discharges of gray water within the Emergency Areas that comply with the requirements set forth in Appendix C.

e. Storm Water Discharges by U.S. Army Corps of Engineers

The Department hereby authorizes the U.S. Army Corps of Engineers to discharge storm water runoff from construction activities related to hurricane response activities in the Emergency Areas. Best Management Practices to avoid erosion and offsite transport of sediments are to be implemented to the greatest extent practicable. The Storm Water General Permit For Construction Activities Five (5) Acres Or More (LAR100000) can be accessed on the LDEQ website (www.ldeq.org) and contains applicable Best Management Practices for

erosion and sediment controls in Part IV. Storm Water Pollution Prevention Plans.

§ 2. Solid Waste Management

a. Owners and operators of solid waste management facilities permitted by the Department before the Hurricane are authorized to make all necessary repairs to restore essential services and the functionality of stormwater management and leachate collection systems damaged by the Hurricane, without prior notice to the Department. Within thirty (30) days of commencing the work of such repair or replacement, however, the permittee shall notify the Department in writing, describing the nature of the work, giving its location, and providing the name, address, and telephone number of the representative of the permittee to contact concerning the work.

b. Uncontaminated Hurricane-generated debris consisting of trees, leaves, vines, twigs, branches, grass, and other vegetative matter may be disposed of in permitted Type II or Type III landfills. On a case by case basis, the Department may authorize disposal of vegetative debris containing incidental, de minimus, or trace amounts of contamination in a Type II or III landfill.

c. Disposal or processing of any solid waste in or at unpermitted facilities or sites may be authorized by the Department on a case-by-case basis.

d. Uncontaminated construction and demolition debris may be disposed of in a permitted Type III landfill or a site that has been authorized by the Department for such disposal. For purposes of this Order, construction and demolition debris shall be the materials indicated in Appendix D of this Declaration. On a case by case basis, the Department may authorize disposal of construction and demolition debris containing incidental, de minimus, or trace amounts of contamination in a Type III landfill or a site that has been authorized by the Department for such disposal. Uncontaminated construction and demolition debris may be managed at a temporary staging area authorized by the Department. Uncontaminated construction and demolition debris that is

mixed with other uncontaminated Hurricane-generated debris, such as white goods or household hazardous waste, should be segregated from other solid waste prior to disposal in a permitted landfill or authorized disposal site, except in cases where segregation is not practicable.

e. Ash residue from the combustion of yard trash or clean wood wastes may be disposed of in a permitted disposal facility, beneficially used in a manner authorized by the Department, or may be land spread in any areas approved by local government officials except in wellhead protection areas or water bodies.

f. Ash residue from the combustion of other Hurricane-generated debris shall be disposed of in a permitted Type II or Type III landfill, beneficially used in a manner authorized by the Department, or as otherwise specifically authorized by the Department. Metals or other non-combustible materials segregated from the ash residue may also be disposed of in a permitted landfill.

g. White goods (i.e., unsalvageable air conditioners, stoves and range tops, as well as refrigerators and freezers from which food has been removed) shall be stored in an area separate from other solid wastes and shall be stored in a manner that prevents vector and odor problems and shall be removed from the facility or staging area within ninety (90) days.

h. Putrescible waste (e.g., rotting food that has been removed from unsalvageable refrigerators and freezers) shall be disposed of in a permitted Type II landfill.

i. The disposal of excessive accumulations of small animal carcasses shall be in accordance with the Louisiana Department of Health and Hospitals sanitary code. The disposal of large animal carcasses (e.g. horses, cows) shall be in accordance with the instructions from the Louisiana Department of Agriculture.

j. Permitted landfills or transfer stations, pickup stations and staging areas that have been authorized by the Department, within or outside of the Emergency Area, which accept Hurricane-generated debris in accordance with the terms of this Order, may accept Hurricane-generated debris for disposal or

storage without the need to first modify existing permits or certifications. Operators of landfills shall seek modifications of their existing permits to address any long-term impacts of accepting Hurricane-generated debris on operations and closure that are not addressed in existing permits. Long-term impacts are those that will extend past the expiration date of this Order. The requests for modification shall be submitted as soon as possible, but no later than the expiration date of this Order. No permit fee will be required for any modifications necessitated solely by the Hurricane clean-up activities.

k. Authorizations may be issued prior to or following a site inspection by Department personnel for staging areas to be used for temporary storage and chipping, grinding or burning of Hurricane-generated debris. Authorizations may be requested by providing a notice to the Department containing a description of the staging area design and operation, the location of the staging area, and the name, address, and telephone number of the site manager as described in Department correspondence dated September 13, 2004, to the Parish Governing Authorities.

l. Owners and operators who receive temporary authorization pursuant to this Order to process or dispose of solid waste are hereby notified that they must comply with all applicable financial assurance requirements of Louisiana Administrative Code Title 33, Part VII, Chapter 7, Subchapter E. The Department will consider, on a case-by-case basis, requests by local governmental bodies to substitute alternative financial security for the specific mechanisms required by the above-mentioned regulations.

§ 3. Hazardous Waste

Hazardous waste generated as a result of the hurricane event must be separated from other hurricane generated waste and disposed of at a permitted hazardous waste disposal facility. Household wastes collected during this event, which are exempt from the regulatory requirements applicable to hazardous wastes, must be managed not only in an environmentally sound

manner but also in accordance with the appropriate LDEQ rules and regulations governing the storage and processing of this type of waste.

§ 4. Open Burning

a. The Department authorizes local governments or their agents to conduct the open burning of Hurricane-generated trees, leaves, vines, twigs, branches, grass, and other vegetative debris within or outside of the Emergency Area, without prior notice to the Department and provided that the provisions of LAC 33:III.1109.D.6. are met. This Order does not authorize any other outdoor burning of non-listed debris streams. Within seven (7) days of commencing any such burning, the local government or its agent shall notify the Department in writing, describing the general nature of the materials burned, stating the location and method of burning, and providing the name, address, and telephone number of the representative of the local government to contact concerning the work and the anticipated duration of the burning event. This Order does not relieve the local government or the agent from any requirement to obtain an open burning authorization from any other governmental entity empowered to grant such authorizations. Notwithstanding the provisions of this paragraph, the burning of asbestos-containing materials or hazardous waste is prohibited.

b. The Department will consider, on an individual basis, requests for approval for open burning, by persons other than local governments or their agents, of Hurricane-generated trees, leaves, vines, twigs, branches, grass, and other vegetative debris. Any such burning approved by the Department must be conducted in compliance with the requirements of LAC 33:III.1109.D.6.

§ 5. Air Pollution Sources Other than Open Burning

a. The Department authorizes the minor repair of any previously permitted stationary source of air pollution that was damaged by the Hurricane to restore it to its previously permitted condition without prior notice to the Department. Within thirty (30) days of commencing such repairs, however, the permittee shall notify the Department in writing, stating the location and nature of

the work and providing the name, address, and telephone number of the representative of the permittee to contact concerning the work. Minor repairs are repairs that would not constitute reconstruction under any definition of 40 CFR Part 60, 61 or 63 and that could not affect potential to emit any pollutant. Repairs that would constitute reconstruction under any definition of 40 CFR Part 60, 61 or 63, or repairs that could affect potential to emit any pollutant are not authorized by this Order.

b. The Department will consider, on an individual basis, requests for approval for the following sources of air pollution:

i) temporary air pollution control devices, such as portable flares, used for vessel and pipeline segment purging and the limited operation of facilities with damaged vapor control equipment;

ii) portable storage tanks, used for interim storage while damaged equipment is being repaired; and

iii) repairs, other than the minor repairs addressed in Section 4.a above, of permitted stationary sources that have been damaged by the hurricane, provided that the sources are restored or replaced with equipment that is identical or the functional equivalent, to meet permit conditions.

c. The throughput of any temporary gasoline storage vessels used exclusively for providing gasoline to employees of the tank operator will not be counted toward the annual or 30-day average throughput for purposes of determining the applicability of control requirements under LAC 33:III.2131. This subparagraph applies only to gasoline provided to employees at or below the operator's cost. This subparagraph does not exempt the operator from any other applicable regulatory requirements, specifically including, but not limited to, the spill prevention and control requirements of the Louisiana Water Quality Regulations (LAC 33:IX).

d. LAC 33:III.507.J.2 provides that an upset condition constitutes an affirmative defense to an action brought for noncompliance with technology-based emissions limitations. LAC 33:III.507.J.2.d requires the permittee to notify

the Department no later than two (2) working days after the time emissions limitations were exceeded due to the upset. Because of the circumstances caused by the Hurricane and the need to apply facility resources to quickly repair and correct conditions caused by the upset, the Department extends the notification requirement referenced above to seven (7) days.

§ 6. Asbestos Clean-up

a. The Department waives the requirement for prior notification for emergency demolition or emergency cleanup of asbestos-containing material resulting from the Hurricane. Within one (1) business day of commencing such demolition or cleanup, however, the person responsible for such work shall notify the Department in writing. The notification shall be consistent with the information on the Notice for Asbestos Demolition or Renovation form, AAC-2, and shall include the location and nature of the work and the name, address, and telephone number of the operator on the project. The procedures in LAC 33:III.5151 and LAC 33:III.Chapter 27 for handling regulated asbestos-containing material shall be complied with during demolition and cleanup. Asbestos-containing material shall be disposed of in a permitted Type I or Type II landfill in accordance with LAC 33:VII of the Louisiana Administrative Code. The incidental admixture of construction and demolition debris with asbestos-contaminated waste (i.e., incidental asbestos-contaminated debris that cannot be extracted from the demolition debris) may be disposed of in a permitted Type III landfill or a site that has been authorized by the Department. Burning of asbestos containing material is prohibited.

b. The Department waives the requirement pursuant to LAC 33:III.5151.F.1 that an affected facility be thoroughly inspected for the presence of asbestos. Debris generated by the renovation or demolition in the affected area does not need to be handled in accordance with the requirements of LAC 33:III.5151.F unless it is known to be Regulated Asbestos-Containing Material, as defined by LAC 33:III.5151. However, appropriate personal protection equipment (e.g., tyvek suits, appropriate respirators, etc.) is recommended.

c. The Department waives the requirement pursuant to LAC 33:III.2799.E.2.b.ii, that applicants receiving training from providers not recognized by the state of Louisiana also submit proof of training in current Louisiana asbestos regulations (see LAC 33:III.2799.F.5.g).

d. The Department waives the requirement pursuant to LAC 33:III.2799.F.5.c.i that recognized asbestos Training Providers give the Department notice at least five days prior to class commencement. (Notification must be made at least three (3) days prior to a course when only the state regulations are to be taught.) Notice shall be provided to the department within 24 hours of class commencement.

e. Local education agencies and state government may make emergency use of a building as a school or state building. The agency making use of the building may request an extension of the deadline to inspect the building within four (4) months of the decision to use the building pursuant to LAC 33:III.2707.A.2.

f. The Department waives the requirement pursuant to LAC 33:III.2723.A.2 that the local education agency or state government must submit a management plan prior to any building's use as a school or state building. A management plan shall be submitted within six (6) months of the initial use of the building.

g. In addition to the qualifications established by LAC 33:III.2799.D.3, the Department may accredit as an "abatement project designer" any individual who:

i) has a Bachelor of Science in a related scientific field with five (5) years experience as a Contractor/Supervisor working under the direction of a Louisiana Accredited Project Designer, planning and implementing asbestos abatement projects;

ii) has at least ten (10) years experience as a Contractor/Supervisor working under the direction of a Louisiana

Accredited project Designer, planning and implementing asbestos abatement projects; or

iii) has completed an application developed by the Department, and received signatures from two Louisiana accredited Project Designers indicating that the applicant has the knowledge and skills to perform this type of work.

h. The fee charged for the Emergency Processing of Worker Accreditation for Asbestos (i.e., LAC 33:III.223, Fee #2070) shall be reduced to \$66.00 (i.e., the same fee as for normal processing, Fee #2060).

§ 7. Underground Storage Tanks

Before placing any hurricane impacted Underground Storage Tank (UST) system back in operation, and no later than ninety (90) days after hurricane related conditions permit, the owner and/or operator shall perform an emergency evaluation of the UST system. The evaluation shall consist of, at a minimum, a general inspection of the UST system, followed by performing the start up protocol contained in Appendix E, "Plan For Evaluating Underground Storage Tank Sites Impacted by Hurricane Katrina," dated September 19, 2005. Before placing fuel into any UST system that has been damaged or has sustained a release, the owner/operator must repair or replace the UST system, perform precision tank and line tightness tests and leak detection system tests, and provide a fully functional corrosion control system.

During the time that the UST system is not accessible due to conditions resulting from the hurricane, the owner/operator of the UST system is relieved of the requirements for release detection, corrosion protection, and inventory control. Each owner/operator shall report any suspected UST releases to the Department within seven (7) days of gaining knowledge of the suspected release, unless an emergency condition makes it impossible for the owner/operator to do so, in which case the owner/operator shall report the suspected release to the Department as soon as he/she is able. All

recordkeeping requirements for inoperable systems are suspended during the time of this emergency declaration. During the time of this declaration, in the areas affected by the hurricane, non-compliance with release detection, corrosion protection, and inventory control for UST owners and operators will not constitute non-compliance for purposes of the deductibles enumerated in La. R.S. 30:2195.10.

§ 8. Special Waste (Reuse and Recycle)

Every effort should be made to minimize the disposal of reusable and recyclable material in landfills. Diversion, composting and recycling debris are priorities. Debris handlers should make every effort to properly handle and recover debris materials that have reuse value, are recyclable or the release of which into the environment would be detrimental or is prohibited, e.g. used motor oil. Appendix F lists special waste from specific sources (households, businesses, schools, public buildings, automobiles and boats) and references the FEMA Debris Plan, which provides information intended to assist operators of solid waste facilities, recycling centers, scrap metal dealer, local governments, and contractors in handling of certain debris from the Emergency Areas.

§ 9. General Conditions

a. This Emergency Order does not convey any property rights or any rights or privileges other than those specified in this Order.

b. This Emergency Order only serves as relief for the duration of the Order from the regulatory and proprietary requirements of the Department, and does not provide relief from the requirements of other federal, state, and local agencies. This Order therefore does not negate the need for the property owner or facility operator to obtain any other required permits or authorizations, nor from the need to comply with all the requirements of those agencies.

§ 10. General Limitations

The Department issues this Emergency Final Order solely to address the emergency created by the Hurricane. This Order shall not be construed to authorize any activity within the jurisdiction of the Department except in accordance with the express terms of this Order. Under no circumstances shall anything contained in this Order be construed to authorize the repair, replacement, or reconstruction of any type of unauthorized or illegal structure, habitable or otherwise.

§ 11. Other Authorizations Required

Nothing in this Order shall eliminate the necessity for obtaining any other federal, state, or local permits or other authorizations that may be required.

§ 12. Extension of Time to Comply with Specified Deadlines

For facilities regulated by the Department in the Emergency Area, this Order extends the time for a period of thirty (30) days to comply with the following specified deadlines that occur between August 28, 2005, and the expiration of this Order:

- a. The time deadlines to conduct or report periodic monitoring required by permits, other authorizations, enforcement actions, or settlement agreements, except for monitoring required by air permits issued under Title IV or V of the Clean Air Act or under the PSD program;
- b. The time deadlines to file an application for renewal of an existing permit, except for air permits issued under Title V of the Clean Air Act.

§ 13. Completion of Authorized Activities

- a. All activities authorized under this Emergency Order must be commenced before the expiration of this Order unless otherwise provided in an authorization or permit. The deadline for commencement under any authorization or permit issued under this order may be extended on a showing that contractors or supplies are not available to commence the work, or if additional time is needed to obtain any required authorization from the Federal Emergency Management

Agency, the U.S. Army Corps of Engineers, or other local, state, or federal agencies.

b. A blanket approval of time extensions under Louisiana Administrative Code 33:V.1109.E.2 is necessary within the Emergency Areas for hazardous waste generators and small quantity generators for the storage of their hazardous wastes on site, pending the cleanup of the Hurricane damage and restoration of essential services. The rules authorize a thirty (30) day extension because of unforeseen and uncontrollable circumstances. The specific effects of the Hurricane were unforeseen and uncontrollable. Therefore, to avoid having to issue a potentially large number of individual approvals on a case-by-case basis and waste limited agency resources during the time of emergency, the Department authorizes a general extension of time of thirty (30) days from the expiration of this Order for all such hazardous waste generators and small quantity generators for the storage of their hazardous wastes on site, in the parishes within the Emergency Areas, and where their ninety (90) day accumulation period expires within the term of this Order.

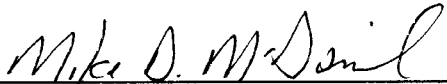
§ 14. Amendments

This Order may be amended as required to abate the emergency.

§ 15. Expiration Date

This Second Amended Declaration of Emergency and Administrative Order shall take effect immediately upon execution by the Secretary of the Department, and shall expire in sixty (60) days from the date of execution set forth below, unless modified or extended by further order.

DONE AND ORDERED on this 2nd day of November, 2005, in
Baton Rouge, Louisiana.



Mike D. McDaniel, Ph.D. Secretary

APPENDIX A

GUIDANCE PROTOCOL FOR SANITARY WASTE WATER TREATMENT SYSTEMS

The following protocol is intended to assist operators of sanitary waste water treatment systems in the Emergency Area in start up and operation.

1. Access

Entrance to the treatment plant should be considered only after flood waters have receded enough to allow safe operation of the treatment plant including the safe conditions for staff. Accessibility to treatment plants in restricted areas may need to be cleared with the Office of Emergency Preparedness. Contact LDEQ (SPOC 225-219-3640) if assistance in gaining access to the treatment plant is required. The use of sound personal protective equipment for safety in unsanitary or unsafe conditions is required. Early return to compliant operation minimizes long term problems within the entire wastewater system.

2. Power Supply

For use of generator power, arrange for a reliable and continual fuel source. Contact LDEQ (SPOC 225-219-3640) if assistance in obtaining fuel for power generation at your treatment plant is needed. If no generation is available and you must wait for electrical providers; consider notification to residents of the effect on collection lines. If removal of clean out plugs is needed to prevent back up into homes, notify affected customers warning them to remain clear of these areas. If pump trucks are used, LDEQ can advise of locations to dispose of the pumped sewage.

3. Start Up

Once it is safe, re-power the treatment system, aerators and pumps. The primary goal is to remove sanitary wastewater from contact with humans, while making every effort to do so in a manner that is practical and least impacting on the environment. Activate disinfection units and maintain them. Initial effluent will likely be poorly treated and of a very poor quality. Adequate disinfection will be important to protect human health downstream of the discharge. If the system has been down and/or without power for an extended period of time, resident bacteria used in the treatment process may need to be re-established. Consider reseeded the system with activated sludge from operating aerated treatment plants. Several treatment plants are available for use in reseeded. Contact LDEQ for information regarding system seed sources.

4. Monitoring

Watch plant operations carefully to confirm it is functioning properly. Ensure that lift stations within the collection system are functional. Without functioning lift stations,

sewage is not being removed from residences and sent for treatment. Visually observe effluent to maximize treatment effectiveness in the short term. If simple tools and/or tests are available to diagnose the plant's operational status ("sludge judge", settle-o-meter, dissolved oxygen meters, BOD analyses) use them frequently. If your plant is discharging poorly treated sewage, consider the impacts to persons, fish and wildlife downstream, including the possibility that drinking water intakes may be located downstream of your effluent. Notification to downstream users may be necessary to protect human health. Sample and analyze your effluent per LPDES requirements as soon as you are able.

5. Notifications and Documentation

Discharges that result in emergency conditions (threat to human health and the environment) must be reported immediately (1-877-925-6595). Discharges that result in emergency conditions (threat to human health and the environment) may require notification to affected persons. Report to the DEQ any discharges that interfere with downstream uses, such as swimming or drinking water sources or if fish kills occur. Discharge Monitoring Reports (per permit requirements) should be used to notify the DEQ of non-emergency conditions. Notification to sewage users may be necessary if problem with the system prevents removal of sewage from residences (or other human contact) on an on-going basis. Notification to downstream users may be necessary to protect human health. Notify the Local Office of Emergency Preparedness when hurricane damage repairs are known – Federal Emergency Management Agency (FEMA) may be able to help with costs associated with hurricane damage.

A permittee who wishes to establish the affirmative defense of upset must document the cause of the upset, that the facility was being properly operated at the time of the upset, that notice of the upset that exceeded effluent limitations was submitted to the DEQ and that the permittee took all reasonable steps to minimize or prevent the likelihood of adversely affecting human health or the environment.

6. Records Management

Hard copy or electronic copies of files associated with environmental issues for your facility may be available at the DEQ. Files destroyed by the hurricane can be obtained by the Responsible Persons for your system from the DEQ free of charge. Please contact Records Management at (225) 219-3172 or online at <http://www.deq.louisiana.gov/pubRecords/>.

APPENDIX B

TEMPORARY HOUSING SITE SELECTION

Initial Screening

Sanitary Wastewater

- Attempts must be made to route sanitary wastewater to an existing wastewater collection system or wastewater treatment system whenever feasible. This option requires no permitting action or approval from LDEQ. However, the primary FEMA contractor shall notify the Department, in writing, of any such discharge to an existing waste water collection system.
- If a point source discharge is to be made into waters of the state, identify the effluent route to the first named waterbody (a waterbody that is readily recognizable).
- Avoid discharge into a drainage system that goes through or next to a sensitive area. Sensitive areas include, but are not limited to: drainage behind a subdivision, school, or park; drainage that routes the effluent through a private pond or private property; or discharge into a designated outstanding natural resource waterbody.
- If feasible, route effluent to the Mississippi River, or through local drainage to the Mississippi River. If not possible, route effluent directly into the largest waterbody in the vicinity, or into the waterbody's drainage system as close as possible to the waterbody.
- Mobile homes will be rated at 250 gallons per day per mobile home. Travel trailers will be rated at 125 gallons per day per trailer. If washing machines will be made available outside of the mobile home or travel trailer (in a washateria) 800 gallons per day per washing machine will be factored into the allowable capacity. Any combination of the above should be utilized to determine overall gallons per day per site.
- All single point source discharge into waters of the state should be limited to 100,000 gallons per day in order to qualify for rapid coverage under the Louisiana Pollutant Discharge Elimination System General Sanitary Permit. Discharges in exceedence of 100,000 gallons per day will be evaluated by LDEQ on a case by case basis in compliance with water quality standards of the receiving waterbody.

Waste

- If feasible, select site that is an existing development, such as, an existing mobile home park, or a site that has existing infrastructure that can be utilized.
- Research existing databases and make on-site physical observations for former municipal waste sites, abandoned hazardous waste sites, former underground storage tank remediation sites, etc. These areas should be avoided as locations for staging or locating temporary housing.

Notification after Initial Screening

- After the initial screening, notify LDEQ and provide the following information:
 - Location – site name, physical location (911 address if available) and coordinates (i.e. latitude and longitude) shall be provided.
 - Identify the method of wastewater treatment or management. Notification must be made of connection to an existing wastewater collection system or treatment system (provide name of system); collection for off-site disposal (provide disposal name/location); or treatment and discharge to surface waters of the state.
 - If proposal is to discharge to surface waters from a treatment system that did not previously discharge at the proposed location, provide an estimated design flow (based on numbers above) and the effluent discharge route to first named waterbody. (Ex. unnamed ditch, to LA Hwy 19 ditch, to unnamed creek, to White's Bayou, to the Comite River.)
- Notification must be made to LDEQ at PO Box 4313, Baton Rouge, LA 70821-4313 or by fax at (225)219-3309 attention Mr. Lenny Young, Administrator, Water and Waste Permits Division.
- Following notification as provided in this section, LDEQ will provide comments on the proposed site.

Storm Water Permit Prior to Construction

- If dirt work is going to be required at the site, a stormwater general permit for construction may be required.
- If the area to be developed is less than one (1) acre, coverage under a stormwater general permit is not required.
- If the area to be developed is at least one (1) acre but less than five (5) acres, coverage under Construction General Permit, LAR200000, will be required. A Notice

of Intent (NOI) is not required to obtain coverage under this permit. However, a storm water pollution prevention plan (SWPPP) must be prepared and implemented at the time construction begins. A copy of the permit is available at <http://www.deq.louisiana.gov/permits/lpdes/pdf/LAR200000.pdf>. A Notice of Termination (NOT) is required when construction is complete.

- If the area to be developed is five (5) acres or greater, coverage under the Construction General Permit, LAR100000, will be required. Submittal of a NOI (CSW-S) is required prior to commencement of construction. The NOI can be found at <http://www.deq.louisiana.gov/permits/lpdes/csw-g.doc>. A copy of the general permit can be found at <http://www.deq.louisiana.gov/permits/lpdes/pdf/LAR100000.pdf>. Submission of an NOT is required when construction is complete.
- Close attention must be given to the Historic Preservation sections of each of the construction general permits for any construction at previously undeveloped sites.
- Coverage under the construction general permits is necessary prior to construction. However, authorization to discharge as described is not required before construction, but is required before the discharge begins.

Registration for Authorization for Direct Discharges

- For discharges totaling less than 100,000 gallons per day, a Notice of Intent (NOI), form WPS-G, must be submitted to the LDEQ at the above address. The NOI is available at <http://www.deq.louisiana.gov/permits/lpdes/wps-g.doc>. A copy of LPDES Sanitary General Permits are available on the DEQ web site at <http://www.deq.louisiana.gov/permits/lpdes/lpdesgenpermits.htm>.
- Proposed discharges greater than 100,000 and particular discharges going directly into the Mississippi may be granted authorization to discharge under an Administrative Order or an individual LPDES permit on a case-by-case basis. If an Administrative Order is granted, application for a permit shall be made to LDEQ within thirty (30) days. Please contact LDEQ for additional information if this applies to your site.
- Contact for coverage under a Sanitary General Permit can be made to Tom Killeen, Manager Municipal and General Permits Section @ (225) 219-3181 or by e-mail at tom.killeen@la.gov.
- For FEMA temporary housing sites, the primary FEMA contractor shall apply for and be the responsible entity for the permit, operation, maintenance and reporting requirements to LDEQ.

Additional Recommendations for the Housing Sites

Water

- Wastewater treatment plants (WWTP) must be operated by a certified operator.
- WWTP's must be properly operated and maintained at all times.
- Disinfection of effluent must be provided.
- Permittee should implement a program to inform residents of things that might be harmful to the WWTP such as the introduction of grease or large amounts of household chemicals to the treatment plant.

Waste

- Provide for collection and disposal of solid waste.
- Provisions should be made for proper disposal of household hazardous waste during the operation of the facility and as residents leave the facility.
- It is recommended that the residents be informed on the benefits and requirements of proper disposal of solid waste and household hazardous waste.

Recycling

- Whenever feasible, provide for recycling, such as, providing a recycling center on site with appropriate recycle containers.
- Inform residents on the proper procedures for recycling household materials.
- Recycling incentives for residents can prove beneficial.

Open Burning

- Open burning at these sites should be prohibited. This does not include charcoal or gas grills.

Site Closure

- Once all the residents have left, the site must be closed.
- All solid and household hazardous waste shall be removed and properly disposed.
- If a WWTP was used for treatment of sanitary wastewater, it shall be removed. A request for termination of coverage under the permit or Administrative Order issued for coverage must be submitted to LDEQ.
- Notification of closure must be made to LDEQ. The Department will approve the site for closure.

APPENDIX C

REQUIREMENTS FOR THE CONDITIONAL AUTHORIZATION OF DISCHARGES OF GRAY WATER TO SURFACE WATERS OF THE STATE OF LOUISIANA

For purposes of these requirements, gray water shall be defined as wastewaters from all fixtures except toilets, including but not limited to wash waters from kitchen, bathroom, and laundry sinks, tubs, and washers.

Unless the Department gives written notice to the contrary, gray water discharges to surface waters of the State, within the Emergency Areas, are hereby authorized, if the following requirements are met:

- Attempts must be made to route gray water to an existing wastewater collection system or wastewater treatment system whenever possible.
- Discharges of gray water shall be made directly into a ditch, drainage or waterbody where feasible.
- Human contact with gray water discharges shall be avoided to the greatest extent possible.
- Surface application of gray water shall not be used for irrigation of food plants.
- The discharge of gray water may not contain human waste or any chemicals derived from activities such as cleaning car parts, washing greasy or oily rags, disposing of waste solutions, or soiled or infectious garments.
- The application of gray water shall be managed to minimize standing water on the ground surface.
- Any gray water storage tank must be covered to restrict access and to eliminate habitat for mosquitoes or other vectors.

APPENDIX D

HURRICANE GENERATED MATERIALS ALLOWED AT A PERMITTED CONSTRUCTION AND DEMOLITION DEBRIS (C&D) LANDFILL OR DEPARTMENT AUTHORIZED SITE

The following hurricane generated materials shall be allowed for disposal at a permitted construction and demolition debris (C&D) landfill or a Department authorized site:

- Nonhazardous waste generally considered not water-soluble, including but not limited to metal, concrete, brick, asphalt, roofing materials, sheet rock, plaster, lumber from a construction or demolition project, and other building or structural materials;
- Furniture, carpet, and painted or stained lumber contained in the demolished buildings;
- The incidental admixture of construction and demolition debris with asbestos-contaminated waste. (i.e., incidental asbestos-contaminated debris that cannot be extracted from the demolition debris); and
- Yard waste and other vegetative matter.

The following materials shall not be disposed in a construction and demolition debris landfill, but segregated and transported to an LDEQ approved staging area for eventual management, recycling and/or disposal at a permitted Type II Landfill, unless segregation is not practicable:

- White goods
- Putrescible Waste

APPENDIX E

PLAN FOR EVALUATING UNDERGROUND STORAGE TANK SITES IMPACTED BY HURRICANE KATRINA

PROBLEM DEFINITION

On August 29, 2005, Hurricane Katrina struck Louisiana causing widespread damage within a ten (10) parish region surrounding and within the greater New Orleans area. The specific effects of Hurricane Katrina were unforeseen and uncontrollable; and emergency conditions (threats to human health and the environment) persist. Underground Storage Tank (UST) sites have been impacted by flood waters which will require actions be taken to place these sites back into operation. Steps necessary to place the site into operation are being outlined to ensure that new releases do not occur and if releases are identified in this process that they are properly addressed. The focus of this effort will be to place these sites into operation while ensuring protection of human health and the environment.

BACKGROUND

Flooding and damage related to Hurricane Katrina has raised many issues regarding Underground Storage Tank site status. Damage to UST systems as well as remediation systems is expected. The impact of this damage must be evaluated to determine what steps are necessary to place these sites back into service.

In the six (6) parishes that suffered the most severe damage due to the storm (Jefferson, Orleans, Plaquemines, St. Bernard, St. Tammany and Washington parishes) approximately 848 active UST sites are known to be present with approximately 2543 underground tanks. A number of these sites have either been damaged or flooded.

Damage that occurs to UST systems generally results from: the buoying up of tanks which are partially full or empty, water entering the tanks and displacing product, failure of underground piping as a result of stresses induced by groundwater pressures or debris, and damage to electrical systems from extended contact with water. Additionally, another route of infiltration exists if the level of floodwaters exceeds the top of the vent lines. Regulated UST's which are weighted down with fuel or anchored by other means (deadmen or attached to an underlying pad) and have properly installed and tightened filler caps and vapor recovery port caps should sustain little impact, even after being submerged for days.

Tanks in which fill caps are not tightened will fill with water and then spill product, some of which may percolate into shallow soil. Empty or near-empty tanks will float up, destroying overlying concrete/asphalt and distribution lines, also spilling product. In these situations, it is expected that the entire UST system would require replacement.

Presently, the extent and magnitude of damage to UST systems themselves and to the shallow subsurface environment as a result of Hurricane Katrina is unknown. At this time the primary objective is to put these systems back into proper service to meet the fuel supply need of initial and subsequent response efforts. Later, as time and resources permit, assessment and remediation of any environmental impacts will take place.

UNDERGROUND STORAGE TANK EVALUATION

Underground Storage Tank sites flooded by the hurricane must be evaluated to determine response actions necessary to place these UST facilities back into service and protect human health and the environment. New product should not be placed in the tanks if there are indications that the integrity of the tank has been comprised when performing the activities outlined below.

General Information:

UST Owners/Operators will be responsible for evaluating underground storage tank systems to determine if they are suitable for receiving product. Flooded systems that are **determined to be suitable for receiving product** may be put back into service and should have an integrity test performed as soon as contractors and services become available to perform the testing and no later than six (6) months after product was first placed into the tank after flooding. If the tank inspection outlined below (or subsequent monitoring of the tank), indicates that the system has been comprised; **the system should be taken out of service** and repaired or replaced as necessary and an integrity test performed prior to again putting the system into operation.

LDEQ has established a contact telephone number to be used by contractors and citizens for reporting exigent conditions and for questions concerning problems with UST systems. This UST "hotline" will be manned by agency staff to assist the regulated community. The UST hotline number is (225) 219-3406 (LDEQ 5th floor receptionist). These procedures for contractors are being provided to tank owners, tank removal and installation contractors, response action contractors and trade groups that represent the industry such as Louisiana Oil Marketers Association and Louisiana Mid-Continent Oil and Gas Association. This information will also be posted on LDEQ's Web Site.

General Evaluation Protocol for Contractors:

No equipment should be turned on prior to examination. Check all electrical panels and make sure they are clean and dry. All equipment related to electric power service should be inspected and any necessary repairs should be made prior to power restoration. This includes all fueling systems, leak-detection devices and corrosion prevention (impressed current) equipment. The electrical system should be checked for continuity and shorts (pumps, turbines, dispensers, ATG consoles, emergency shutoff, panel box, etc.)

Specifically, all electrical junction boxes and dispenser heads should be opened, inspected and dried if necessary. Conduits should be inspected for the presence of water, insulation damage, shorts or opens. Conduits exhibiting water should be dried or vacuumed as appropriate and all defective wiring should be replaced. To apply electrical power to a UST system before conducting basic examination could be extremely dangerous.

Submerged pumps and dispensers should not be operated if there is the possibility of water entering into the system as pumping water may damage hydraulic components.

Technical Protocol for Contractors:

These protocols should be followed to place tanks back into service:

1. Stick tanks using water finding paste or read automatic tank gauge system, if operable, to determine whether water has entered the UST.
2. Flooded or water impacted tanks and all lines may need to be drained of water and dirt/mud or perhaps pumped dry and cleaned as conditions warrant. Liquids removed must be properly handled and disposed.
3. Interstitial spaces of tanks and lines of double walled systems, if flood-impacted, will need to be drained and flushed where possible. Blockage of interstitial spaces will render leak detection useless. Depending on the level of residual contamination at the facility, certain leak detection methods may no longer be viable. Tanks with brine or vacuum interstitial sensors may be returned to service if brine or vacuum levels are normal. Be prepared to update damaged leak detection equipment after emergency conditions are abated.
4. All facility sumps, pans, and spill buckets need to be pumped dry and cleaned. Replace sump lid gaskets if applicable. If sump lids are missing, replace with new water tight lids. Replace sumps and spill buckets that fail to prevent water intrusion after initial cleaning and drying.
5. Check tank bottoms for water and debris. Remove and dispose as appropriate (see item #2 above).
6. Check deflection of fiberglass tanks. If deflection is greater than manufacturer's specification (general guideline is 2%) call the manufacturer for instruction.
7. If tanks shifted and problems are found, **repair or replace them** according to manufacturer's instructions and appropriate industry standards and regulations. Obviously, these **systems should be shut down and not receive fuel** until they are deemed safe for reuse (tightness tested).
8. Check vents for movement, cracking, blockage and proper operation.
9. Check dispenser filters and submersible check-valve screens for plugging with dirt or mud.

10. Flush dispensers and UST system if necessary. Collect fluids for proper disposal.
11. Check critical safety devices (e.g., emergency power off controls, line leak detectors, air compressor pressure limiters, shear valves, stop switches, isolation relays on dispensers, etc.) Shear valves may be salvaged if they can be cleaned and lubricated with corrosion preventative. Some will still have to be replaced.
12. Sump sensors may need to be replaced after emergency conditions cease.
13. In-tank pumps, Automatic Tank Gauge (ATG) probes, overfill devices, automatic line leak detectors, fill and vapor dust caps, etc. should be assessed. Assess their condition after cleaning and replace as necessary.
14. ATG consoles and any associated electronics that are not submerged, should have a programming and operability check performed by a certified technician after emergency conditions cease.
15. After emergency conditions are abated, submerged Corrosion Protection (CP) rectifiers and associated aboveground equipment protecting tanks and/or lines may have to be replaced. If not submerged have a National Association of Corrosion Engineers (NACE) certified professional perform an operability check of the equipment. Inspect CP lines in saw cuts for damage and replace as necessary. If CP systems are out of service for an extended period of time perform integrity assessment of affected component before placing CP system back into service. A NACE certified professional will be helpful assessing the CP system.
16. Check accessible fittings, valves and miscellaneous piping for damage and corrosion. Clean and replace as necessary.
17. Document all inspection, assessment and repair activities at each UST system site. Provide this information to the LDEQ in stand-alone report format within ninety (90) days of initiation of operations of that UST facility.
18. Submerged dispensers will have to be replaced or repaired as necessary. This includes the hanging hardware. Any suction system dispensers will probably have flood impacted motors and pumps and may need complete replacement.

General Protocol Upon Resumption of Service:

Depending on the level of residual contamination at the facility, certain leak detection methods may no longer be viable. Daily inventory control (with strict record keeping) may be the short-term leak detection method by necessity. Daily checks for water with water-finding paste should be done for several days until it has been determined that the system is tight. If these daily water checks indicate excessive water or the daily inventory control shows loss of product, **the tanks should be emptied of product and use of the tanks should cease.** Notification of these conditions should be made to the LDEQ UST hotline ((225) 219-3406) as soon as practical.

Post Start-Up Protocol for Contractors:

This protocol should be followed once flood-impacted tanks have been placed back into service and emergency response and restoration have been completed or as otherwise directed by LDEQ:

Precision tightness test tanks, lines and interstitial spaces (after emergency conditions abate). Assess interstitial spaces for blockages, especially if used for leak detection. Decisions regarding replacement of tanks and lines should be made based on outcome of these tests. LDEQ field staff should be consulted on these decisions whenever possible. Cathodic protection systems should be checked to make sure they are connected and operational.

These actions are being delayed in an effort to expedite fuel delivery capabilities and due to unavailability of sufficient contractors to perform the otherwise required work in a timely manner. All leak detection equipment must be put back into operation as soon as practically possible or as directed by the LDEQ after the emergency has abated.

Other General Provisions for Owner/Operators and Contractors:

At flood-impacted sites, facilities will be allowed to salvage useable fuel in USTs by checking fuel for water and allow salvage of useable fuel. If flood water covered vent lines, displacement of fuel would have occurred and large volumes of water may exist in the affected USTs and require proper storage/disposal. This water should not be discharged to areas such as streets, storm drains, sumps and ditches that are not permitted to receive these liquids.

Requirements for remediation of contaminated groundwater via approved corrective action plans in place prior to the Hurricane are suspended at UST sites in the parishes of Jefferson, Orleans, Plaquemines and St. Bernard unless otherwise directed by the LDEQ. However, LDEQ may require systems remediating free phased product to continue pumping operations.

Sites which have not experienced impacts from the Hurricane shall continue with routine remedial efforts and reporting (Unless RAC/consulting firm handling the remediation has been affected and displaced by the storm).

All facilities in which remedial efforts are temporarily suspended or delayed must provide notice to the LDEQ UST hotline (225) 219-3406 and provide written documentation as directed.

EVALUATION SCHEDULE

The evaluation of UST status should be initiated as soon as conditions allow flood area re-entry. Further testing will be performed once emergency conditions and

major restoration efforts are complete and when sufficient contractors are available to perform the work. This further testing should be performed no later than six (6) months after product was first placed into the tank after flooding.

APPENDIX F

GUIDANCE FOR SPECIAL WASTE HANDLING, REUSE AND RECYCLING

The following information is intended to assist operators of solid waste facilities, recycling centers, scrap metal dealer, local governments, and contractors in handling debris from the Emergency Areas. The FEMA Debris Plan should be consulted for greater detail.

1. Intent

Every effort should be made to minimize debris disposed in landfills. Diversion, composting and recycling debris are priorities. Debris handlers should make every effort to properly handle and recover debris materials that have reuse value, are recyclable or the release of which into the environment would be detrimental or is prohibited, e.g. used motor oil.

2. Scope

Sources of debris requiring special handling include: households, businesses, schools, public buildings, automobiles and boats.

3. Types of materials by source

The types of debris to which this guidance is directed and the sources from which the subject debris emanates are as follows:

- a. From automobiles: gasoline and diesel fuel, refrigerants, lubricating oils, mercury ABS switches, mercury convenience switches, lead acid batteries, brake and transmission fluid, antifreeze and tires. Propane tanks and large appliances in recreational vehicles should be removed.
- b. From boats: gasoline and diesel fuel, refrigerants, lubricating oils, mercury bilge switches, propane tanks, large appliances, lead acid batteries, transmission fluid and electronics, such as, radar sets, radios, GPS units, and depth finders.
- c. From households and businesses: paints and varnishes, solvents, acids, pesticides, cleaning fluids, pool chemicals, used motor oil, propane tanks, mercury thermostats, liquid mercury, mercury-containing devices, and refrigerants. Large appliances also known as "white goods" may not be landfilled. Refrigerants must be removed. Food should not be left in appliances. Every reasonable effort should be made to recover large electronic devices, such as, television sets, computers and computer monitors.
- d. From schools and public buildings: paints and varnishes, solvents, acids, pesticides, cleaning fluids, pool chemicals, used motor oil, propane tanks, mercury thermostats, liquid mercury, mercury-containing devices, and

refrigerants. Large appliances also known as “white goods” may not be landfilled. Refrigerants must be removed. Food should not be left in appliances. Every reasonable effort should be made to recover large electronic devices, such as, television sets, computers and computer monitors. Special attention should be given to school chemistry laboratories.

3. Monitoring

Demolition teams, debris collectors, local governments and landfill operators should be vigilant for proper handling the above listed items.

4. Recordkeeping

Processors should keep a record of the amount of materials recovered and transported for recycling. Some products already require recordkeeping, e.g. used oil, and duplicate recordkeeping is not required.